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I. CIGARETTE BEETLE (CB) PHYSIOLOGICAL STUDIES

FIELD

The sex pheromone traps at MC captured 1784 CB while the black light traps caught 879 CB during the month of August. These numbers are up slightly from 1750 and 693 caught in July (1,2).

Culturing processes continue with the wild strain of the CB captured in the Maury Street warehouse. First generation CB from the initial cultures are ready to emerge. Bioassays are being established for determining resistance to DDVP and phosphine (3). ?

LAB

Dr. Peter Martin has submitted new cigarette packages wrapped with experimental overwraps and also some packages which have been wrapped following modifications on the packing machines. Hopefully these packages will show improvement as barriers to infestation compared to the first test. Expansion of this test will also allow us to determine more thoroughly the barrier effects of the box versus the soft pack (4).

Separate tests show that packages exposed to adults are infested when eggs are laid at the overwrap seam. The eggs hatch and larvae crawl to the cigarettes through openings along the seam (5).

II. ASSISTANCE TO OTHERS

Moisture retention/loss is being investigated in the perforated polyethylene bags under actual export conditions. One hundred and twenty-six cases of export cut filler were filled using perforated and non perforated polyethylene bags. Samples from each of the bags were submitted for moisture determinations. Thirty six cases each will be sent to Panama and Switzerland for 6 months storage after which they will be returned to Richmond, analyzed, and compared for moisture changes (7).

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III. REFERENCES

1. Drew, S. Cigarette Beetle Sex Pheromone Trap Counts; August 6, 13, 20, 27, 1984.
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3. Drew, S. Notebook No. 7850, p. 96.
4. Faustini, D. L. Notebook No. 7746, pp. 127-129.
5. Lehman, R. M. Notebook No. 8028, p. 31.
6. Minor, M. F. Notebook No. 7197, p. 156.
7. Long, J. S. Notebook No. 7777, p. 106.

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